

The Delta Region

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In a slump after Fort Greely closure, missiles and gold now fortify its future

Just seven years ago it looked as if the Delta region were about to lose most of its economic base with the planned closure of Fort Greely. In 1995 it was estimated that nearly half of the economic base in the Delta region was associated with the fort. It was thought that business tied to the Alaska and Richardson highways, the Trans-Alaska Pipeline, transfer payments and farming could sustain a limited amount of economic activity but it certainly would not fill the shoes the Army was about to leave. It appeared inevitable that the area would wither to a size considerably smaller than its former self. There were optimists who believed the fort could be reconditioned into a prison, boarding school, free-trade zone, commercial cold testing site or something else that might stave off this fate.

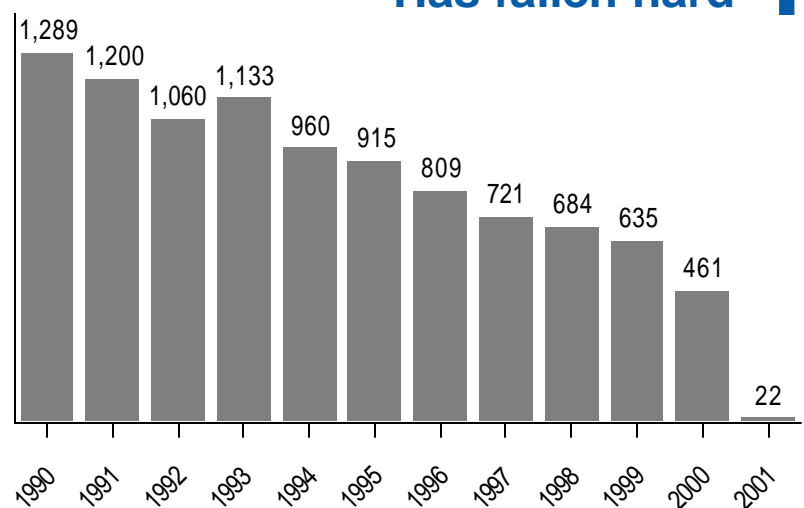
None of these early hopes or promises has materialized, but neither has the very dark scenario. Instead, Fort Greely is now becoming a research site in the nation's budding missile defense system, and the Pogo prospect may develop into a world class underground gold mine.

Where is Delta?

The Delta region, centered around the confluence of the Delta and Tanana rivers near the junction of the Richardson and Alaska highways, is approximately 100 miles southeast of Fairbanks.

Like so many areas in Alaska, it has no specific political boundaries. The city of Delta Junction is the only incorporated community in the area. Fort Greely has delineated borders, but most of the area's geographic lines are poorly defined, or are in continual flux. The region includes Big Delta, Fort Greely, Deltana, Dot Lake, Dry Creek, and Healy Lake, communities that lie within relatively easy commuting distance from the city of Delta Junction. The Delta/Greely School District's boundaries also include most of this area.

Fort Greely Resident Population Has fallen hard **1**



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Economic history is tied to the highway

The cash economy of Delta has always been tied to the highways. That was true even before today's roads were built. The Richardson Highway began as a trail used by the prospectors who traveled between Valdez and the goldfields in Fairbanks. Roadhouses were built along the way. In fact, Rika's Roadhouse, a major visitor attraction today, is an example of one of these very early businesses. But what brought the area real permanence was the construction of the Alaska Highway in 1942. Delta became the northern terminus. With its completion an important slice of Delta's economy became inextricably tied to providing services to visitors, commercial traffic, and other highway travelers. It also made it an attractive place for military airfields that eventually became Fort Greely. By the early 1970s the area's transportation facilities made it a major staging area for the construction and then maintenance of the Trans-Alaska Pipeline. Without the road connection, agriculture would not have developed in the region.

The area's population did fall

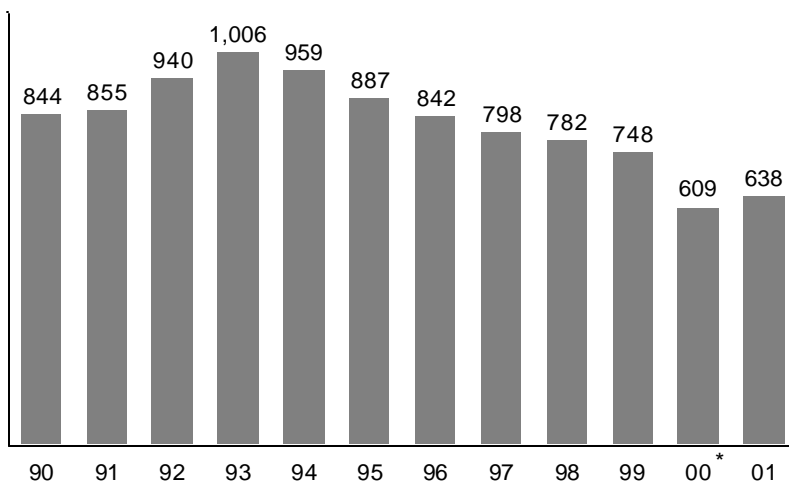
Unlike most areas of the state, the overall population of the Delta area actually declined during the past decade. Most of this decline can be traced to the near closure of Fort Greely. In 1990, Fort Greely had a population of 1,134, but by 2000 it had declined to 461. (See Exhibit 1.) This population loss is reflected in the Delta/Greely School District's enrollment that peaked at 1,006 in 1993 but dropped to 638 in 2001. (See Exhibit 2.) The military population fell sharply and prompted the closure of the school on base in 2000. Station strength at Fort Greely declined precipitously. By 2001 only 22 uniformed military personnel were stationed at the base, compared to the decade high of 489 in 1991. (See Exhibit 3.) For most of the areas in the region, boundary changes between 1990 and 2000 make it difficult to identify population trends of the decade. But it is clear that outside of Fort Greely the population numbers have not fallen so dramatically.

There are a number of reasons that might help explain why the area's population has not fallen further despite the near closure of the fort. The military base operated for nearly sixty years, and it employed a large number of civilians and uniformed military, many of whom chose to stay in the area after retiring. Their presence is captured in the Census Bureau's statistic on veteran status. Deltana's over-18 population is 25 percent veterans, versus 17 percent statewide. For the military retirees in this group, a lack of economic opportunities is offset by pensions and may not be a limiting factor. Some people, however, fear that the area may eventually lose some of this veteran population because on-base medical and recreational services and post exchange facilities no longer exist.

The relatively recent influx of Russian and Ukrainian immigrants to the area is another factor. Census 2000 counted 381 people of Russian and Ukrainian ancestry in the Southeast Fairbanks census area (of which the Delta area represents

2 School Enrollment Hit Hard By base closure

School district enrollment by fiscal year



* School closed on Fort Greely

Source: Delta/Greely School District

the largest slice) compared to 30 in 1990. Moreover, the Delta/Greely School District noted that 27 to 31 percent of the school's enrollment in the 2001/2002 school year were native Russian and Ukrainian speakers —another indication of a big change. One of the attractions of the region for this mainly foreign-born population appears to be the availability of affordable housing and large tracts of arable land. Job opportunities play a secondary role. This new immigrant group consists generally of large young families. According to a study conducted by Information Insights, a consulting firm for the Delta/Greely School District, these families have an average of 3.4 school age children.

The presence of Whitestone Farms, a religious communal group, may also help explain the relative stability of the population in areas outside the military compound. This group's residence was not dependent upon activities on Fort Greely. Several other religious organizations are present near Delta, including a community of Russian Orthodox "Old Believers" from the Kenai Peninsula, who are currently colonizing a large agricultural land parcel near Healy Lake, the Living Community colony at Dry Creek, and the New Hope Community Church in Big Delta.

Delta cuts an interesting demographic picture

With the exceptions of Fort Greely and Big Delta, the region's population is older than that of the state. (See Exhibit 4.) In the Deltana area the median age is nearly 6.5 years older than the statewide average. The percentage of population in the under thirty-five age group is considerably smaller than that of the statewide population, and conversely the percentage of 55 and over is larger.

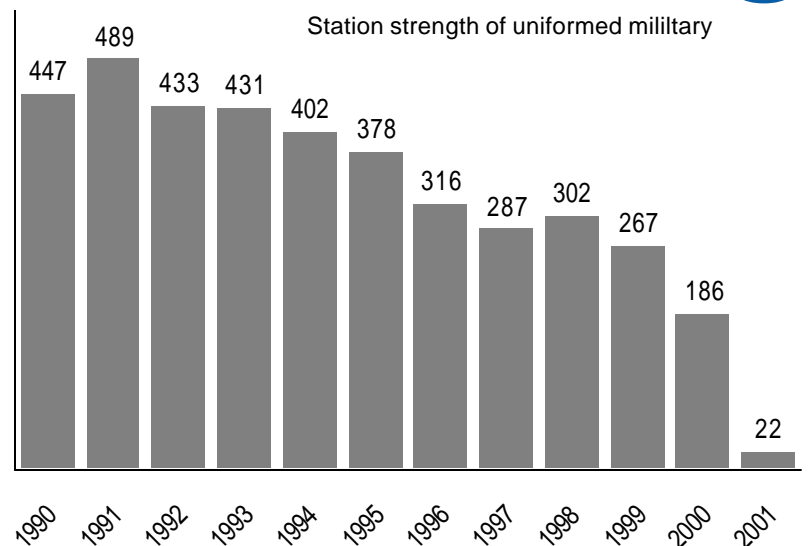
It appears many residents settled in the area in the 1970s and early 1980s. This may be a legacy of the Trans-Alaska Pipeline years when the area experienced a huge influx of workers and new

residents. Many others probably worked at Fort Greely and retired and stayed in the area. To the 2000 Census question "Where did you live five years ago?" most local responses were similar to those of other Alaskans (with Fort Greely being the exception). For example, more than three-quarters of Deltana residents affirmed that they had lived in the same area five years ago.

From a racial standpoint the area is mostly white, with a small Native Alaskan population. With the exception of Big Delta there are more men than women—a statewide phenomenon. There are more married couple households—possibly a reflection of the area's ages. Most of the area's educational attainment levels are not much different from statewide levels.

Unemployment is considerably higher. Income tends to be considerably lower and poverty is higher—dovetailing with the much higher unemployment. It is obvious that the drawdown of military personnel leading to the near closure of Fort Greely impacted the area's economy and continues to affect the area's economic profile.

Military Presence on Fort Greely Has plummeted 3



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

4 A Statistical Snapshot of Delta-Greely Region 2000 Census

	Alaska	Fort Greely	Big Delta	Delta Junction	Deltana
Total Population	626,932	461	749	840	1,570
Age is generally older					
Median age	32.4	23.4	29.4	36	38.8
Less racially diverse					
White	69.3%	65.7%	95.0%	91.4%	91.6%
Native American	15.6%	1.3%	1.5%	4.0%	0.9%
Black	3.5%	19.7%	0.1%	1.1%	1.2%
Asian	4.0%	1.3%	0.5%	1.0%	1.1%
Native Hawaiian and other Pacific Islander	5.0%	2.0%	0.0%	0.0%	0.0%
Other	1.6%	3.7%	0.0%	0.1%	0.4%
Two or more races	5.4%	6.3%	2.4%	2.4%	4.8%
Generally, fewer children					
Under 5	7.6%	16.5%	5.5%	5.7%	6.4%
(5-19)	25.6%	25.1%	35.4%	29.9%	27.9%
(20-34)	20.7%	41.2%	13.2%	13.0%	11.9%
(35-54 year olds)	33.3%	16.9%	33.3%	34.4%	34.4%
(55-64)	7.2%	0.2%	6.6%	9.3%	12.0%
Percent 65 years & over	5.7%	0.0%	6.0%	7.7%	7.3%
Fewer females					
Percent female	48.3%	46.4%	51.9%	47.1%	48.2
Born in the state	38.1%	11.1%	36.7%	23.0%	21.5%
Type of households					
Average family size	3.28	3.53	3.9	3.32	3.3
Family households	68.7%	88.9%	71.5%	66.7%	77.4
Married couple family	52.5%	80.2%	61.2%	52.6%	69.2
Female householder, no husband present	10.8%	7.1%	6.7%	9.0%	5
Householder living alone	23.5%	11.1%	21.8%	28.8%	19.1
More are unemployed					
Percent unemployed	6.6%	3.2%	24.7%	11.6%	12.7
Labor force participation	71.3%	76.2%	51.6%	59.1%	58.9
Income lower, poverty higher					
Personal per capita income (2000 Census)	\$22,660	\$12,368	\$14,803	\$19,171	\$18,446
Median Family Income	\$59,036	\$32,969	\$53,125	\$58,250	\$53,021
Poverty Status of Individuals (1999)	9.4%	10.4%	30.0%	19.4%	15.1%
Educational attainment (25 years +)					
Less than 9th grade	4.1%	0.9%	2.9%	3.7%	4.2%
9th to 12th grade no diploma	7.5%	1.4%	5.3%	4.1%	9.7%
High school graduate	27.9%	22.8%	37.0%	37.0%	34.1%
Some college, no degree	28.6%	34.9%	25.6%	28.4%	25.6%
Associate degree	7.2%	22.3%	6.3%	9.1%	6.5%
Bachelor's degree	16.1%	12.6%	17.6%	12.1%	14.9%
Graduate or professional degree	8.6%	5.1%	5.3%	5.6%	5.0%
Housing characteristics different					
Average household size	2.89	3.25	3.18	2.69	2.87
Vacant housing units	15.1%	64.4%	28.9%	26.1%	19.4%
Seasonal or recreational housing	8.2%	0.0%	22.8%	6.6%	14.6%

Source: U.S. Department of Commerce, Census Bureau

Spectacular demographic changes may be in the offing

Shifts in the coming years could bring change to average age and other characteristics of the area's demographic profile. Continued immigration of a Russian and Ukrainian population alone could alter the demographic face of the area. In a study funded by the Delta/Greely School District, Information Insights predicts that the area will gain 10-12 immigrant families per year. This in-migration of a largely foreign population, and a possible influx of new families tied to the missile defense project and the Pogo Mine could lead to dramatic change. The time frame for these changes is imminent. For example, Information Insights analysts projected that by 2005 the school enrollment for the Delta/Greely school district could easily double.

Government is the area's largest employer

Delta's largest industry is government. In 2001, nearly 42 percent of all wage and salary employment was tied to the public sector, compared to 27 percent statewide. (See Exhibit 5.) Three of the area's top ten employers were federal and state government and the local school district. (See Exhibit 6.) Retail trade is another big player; catering to highway traffic is an important economic activity in the area. The retailers include gas stations, eating and drinking

places and stores. Transportation is also prominent because of highway-related jobs and work tied to the Trans-Alaska Pipeline. Pump Station 9 is located a few miles away. Alyeska Pipeline Service Company, which is classified as a transportation company, is the area's fifth largest employer.

Employment fell to a decade low in 2001

While employment statewide has now grown for 14 straight years, closure of Fort Greely has brought the reverse trend to the Delta region. The decade high for wage and salary employment was 948 in 1993. By 2001, employment had fallen to a decade low of 720—a significant erosion of the area's employment base. (See Exhibits 7 and 8.) The biggest losses, predictably, came in the federal sector. In turn, local government fell because of declining school enrollments. Nearly every sector registered job losses. The other economic players in the region such as agriculture, the pipeline, or highway traffic either lost ground or changed little. For example, Pump Station 10 was closed in 1996. In 1994, Alyeska Pipeline Service Company employed more than twice as many people in the area as it did in 2001. Highway traffic has changed little over the past decade, with dips and increases, but no clear pattern. (See Exhibit 9.) However, this grim economic picture of the past four to five years could be about to change.

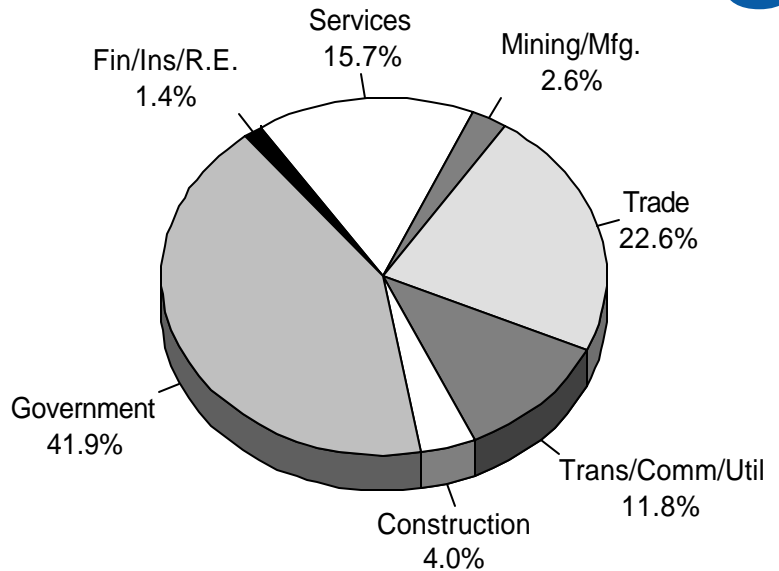
Is the economy about to turn around?

Delta Junction is experiencing major changes. The military's decision to utilize its decommissioned base, Fort Greely, as a potential missile site, and the possibility of a new gold mine have transformed the area's outlook. Construction work on the military's site has begun. The gold mine prospect, located 40 miles northeast of Delta Junction, is nearing its final planning stages after eight years of exploration work.

The missile facility

In 2001, Fort Greely was designated as part of the

Where Delta Residents Work 5



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Delta's Top Ten Employers 2001 6

Rank	Firm	Annual Average Employment
1	Federal Government	143
2	Delta/Greely School District	93
3	State of Alaska	39
4	IGA Food Cache	38
5	Alyeska Pipeline Service Company	36
6	Schooley Group	25
7	Whitestone Farms	20
8	Buffalo Center	17
9	Alaska Steakhouse and Motel	16
10	Family Medical Center	15

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

national ballistic missile defense shield. Nationwide, the Department of Defense plans to spend \$6 to \$7 billion per year to develop a missile intercept system to protect the nation and its allies from terrorist and rogue nation attacks. The concept underlying ballistic missile defense calls for building a fully integrated system, staged at multiple strategic locations, that should be capable of accurately detecting, tracking, intercepting, and destroying all ballistic missile threats.

Fort Greely will become a ground-based facility to test technology for destroying hostile missiles in mid-course. The military chose Alaska as a missile site due to its strategic location, which allows the defense of a very large area. Interior Alaska's low population density contributed to the site's selection. The current construction project at Fort Greely is a test bed facility consisting of six silos. Costs for the project are estimated to be approximately \$325 million.

The test facility at Fort Greely will play an important

role in surmounting the technological challenge of building a functional ballistic missile defense shield. Current plans do not call for test launches of missiles from Fort Greely; these may take place eventually, once planning and safety issues have been resolved.

From infantry to missiles

In 1948, Fort Greely opened as part of the US Army Garrison. Its main mission was to work with and support the Northern Warfare Training Center and the Cold Regions Test Center. Infantry personnel served on the base. In 1995, the Base Re-alignment and Closure Commission mothballed Fort Greely and it became a surplus post in July 2001. For nearly six years, the military planned to turn over a large portion of the post facility to the community of Delta Junction for civilian use, a plan that never came to fruition.

The military's plan to transform this infantry post to a high tech missile test site materialized at quantum speed. Shortly after the formal July 2001 base closure, contractors were on site to prepare the ground for new military construction.

7 Delta Employment Fell Hard During the past three years

Delta region wage and salary employment



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

The planned construction effort

Construction of the missile test site is projected to last until 2004. The first phase includes structural buildings and a camp to house workers. The missile silos will be built in subsequent phases. The Corps of Engineers has project oversight. The main construction contractor is Fluor Incorporated, a large national engineering and construction firm. They also award and administer all subcontracts. Many of these have already been let to local firms. Due to its sheer size this project will have a large impact on Alaska's construction industry. During peak construction more than 500 workers are expected to be on site.

Fort Greely's future

Once built, the Missile Defense Agency plans to

staff the Fort Greely ground station with 50 military personnel. Approximately 100 civilians, consisting of contract engineers, technical staff, security and administrative personnel will also support the operation on base.

A gold mining corridor leads to Delta Junction

Gold prospecting in Interior Alaska has a long history. But little prospecting activity occurred in the immediate vicinity of Delta Junction during the gold rush days. Records show that up until 1996 the Goodpaster mining district, (a close-by area east of Delta Junction), produced only 2,350 ounces of gold. In the early 1900s, a few roadhouses stood at the current location of Delta Junction and were markers on the heavily traveled Valdez-Fairbanks gold field trail.

A regional exploration effort during the early 1980s identified some gold at Pogo Creek. Over the years, the Sumitomo Company continued the

effort but did not find substantial reserves until 1994. Deep-hole drilling confirmed gold mineralization at the Pogo prospect and exploration continued. Subsequent exploration phases identified a substantial discovery at Pogo, a reserve that is estimated to hold 5.5 million ounces of high-grade gold.

So far approximately \$70 million has been spent to obtain permits, gain access, explore and prepare the site. A winter road and an airstrip were built for the exploration team. Recently, Teck-Pogo has become a joint venture between Teck/Cominco and Sumitomo. The company hopes to finalize the permitting process this year or early in 2003. The road issue still poses a problem. It has not been decided yet if an all season road should be permitted or if conditions should be placed to restrict usage after the depletion of the Pogo deposit. And a few other environmental concerns regarding the mine operation still must be resolved.

The proposed project will be an underground

Delta Wage and Salary Employment 1990 to 2001

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2001 Payroll
Total	795	890	912	948	943	868	861	895	925	896	843	720	\$25,238,547
Mining	*	*	*	*	*	0	0	0	0	0	16	4	n/a
Construction	*	*	*	*	*	13	11	19	17	17	26	29	1,158,165
Manufacturing	*	*	*	*	*	5	7	9	17	13	15	15	n/a
Trans/Comm/Util	110	111	125	128	136	118	98	94	91	89	101	85	4,968,168
Trade	94	102	111	137	135	181	188	191	206	177	170	163	6,620,594
Finance/Insur/R.E.	*	*	*	*	*	10	11	11	14	13	13	10	n/a
Services	109	116	116	102	119	115	86	108	113	132	107	113	3,463,054
Government	450	538	539	554	521	426	460	463	467	455	396	302	14,561,341
Federal	302	349	340	330	306	235	264	284	279	257	218	145	7,945,147
State	11	53	52	59	65	55	59	52	52	52	46	49	2,436,650
Local	137	137	148	165	150	136	137	127	136	146	132	108	4,179,544

n/a: data not available

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

mine with a surface mill. A work camp will also be built at Pogo to house the miners on site. Construction costs of the entire complex are expected to run over \$250 million. The project could start in 2003, if it passes the last hurdles of the permitting process. During construction of the mine complex approximately 500 construction workers are expected to be on site for about two years.

The Teck-Pogo Company proposes to operate the mine 365 days 24 hours a day. It expects to employ 288 miners, working a four-day shift rotation during the first years of mining. Employment could increase to 360 in later years of the production cycle. In all, the mine should operate for 11 years.

Some experienced underground miners will likely be brought in from elsewhere in the country, but efforts are being made to recruit the rest of the workers from the Delta region, the Interior and the rest of the state. The four days on/four days off work schedule may encourage many of the workers to live in the Delta area. The mine will not pay for travel beyond the shuttle dropoff.

The training of a future Alaska mining workforce has already started. In 2001, the Delta School District, the University of Alaska Fairbanks, Tanana Chiefs Conference and the Alaska Miners Association formed the Delta Mine Training Center to provide vocational education for workers interested in Alaska's mineral industry. The group developed a curriculum for future miners and obtained a quarry site where students receive hands-on training in blasting, surface and underground drilling. The program is designed to train a local Alaska workforce for employment at the Pogo mine.

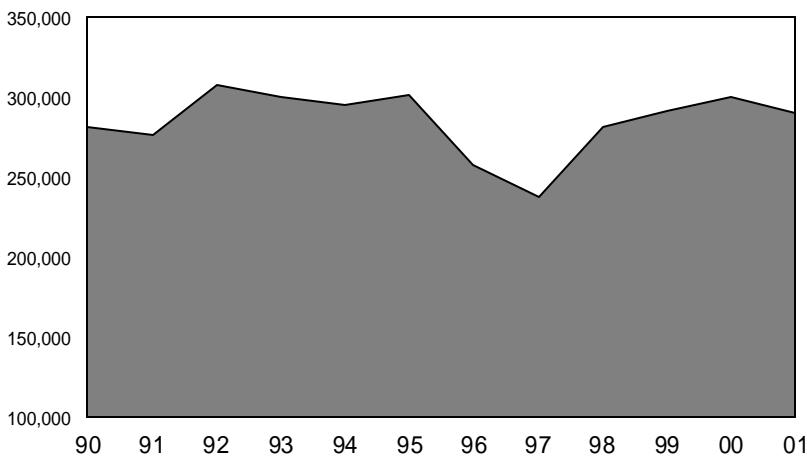
Construction and the operation of the Pogo mine would enhance the economic future of the Delta Junction area. This development prospect could translate into the creation of high quality jobs. Mining and construction jobs are associated with high wages. While the mine prospect and the missile test site may represent a new era in Delta's economy, farming retains its importance.

Agricultural production value rises

For over twenty years, the Delta region of the Tanana Valley has enjoyed a reputation as one of Alaska's two farming regions. The only other farming area is the Mat-Su Valley. According to the 1997 Economic Census there were 75 farms in the Delta area of the Tanana Valley. Only Palmer in the Mat-Su Valley had more farms. Agricultural infrastructure in Delta Junction consists of a dairy processing plant, a privately-owned federally inspected slaughterhouse and meat-packing plant, a farmers co-op fertilizer plant and grain elevator, veterinary clinic, USDA governmental support offices, University of Alaska Fairbanks Delta Research Site and Cooperative Extension Service office.

In 2001, farm production in the Tanana area yielded a value of more than \$7.5 million, the highest in over twelve years. (See Exhibit 10.) Livestock including cattle, hogs, sheep, bison, elk, reindeer and other farmed animals represented

9 Alaska Highway Passenger Traffic Ebbs and Flows



Source: U.S. Immigration and Naturalization Service, and Canada Customs and Excise Revenue

18 percent of the total value of Tanana Valley's agricultural production. Crops, particularly hay, have gained in importance. In 2001, most farmland in production was used to grow hay. (See Exhibit 11.) The Delta area is also Alaska's granary. Barley is the dominant grain crop, followed by oats. In 2002, Delta farmers seeded 4,500 acres of barley compared with 200 acres elsewhere in the state. Production of barley, however, has declined and the current effort represents only one fourth of the 1984 seeded acreage. The cultivation of potatoes and vegetables has recently become more important to Tanana Valley growers.

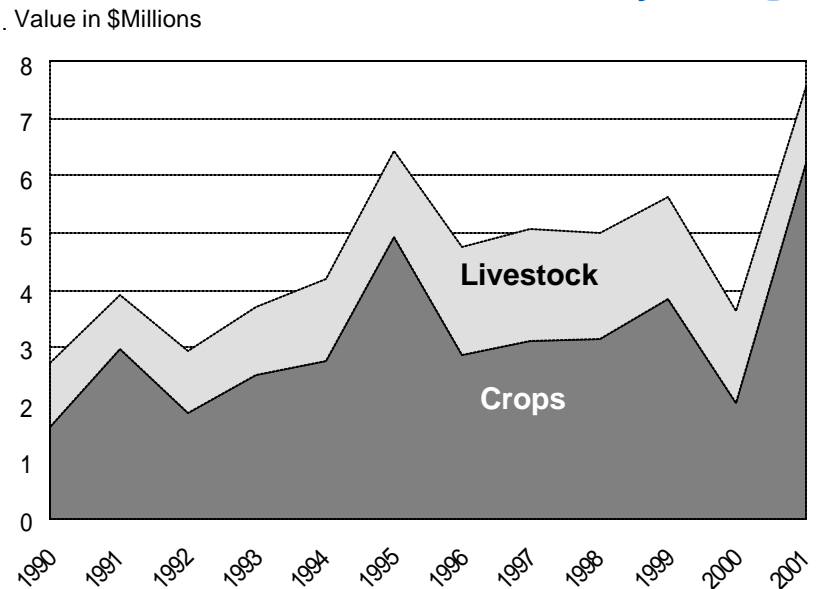
Aside from the production value, Delta farmers also receive cash farm subsidies and conservation program payments from the federal government. In 2001, these amounted to nearly \$1.3 million.

Vast acres of affordable, accessible land are a major attraction in the Delta area. It still is possible for a prospective farmer to buy land and start a new operation by cultivating it or raising livestock. The area also allows for the exploration of new life styles. Hobby or subsistence farming is an attractive alternative for some. Another advantage of the Delta area lies in the fact that it is on the road system, only a two hour drive from the urban center of Fairbanks.

Conclusion

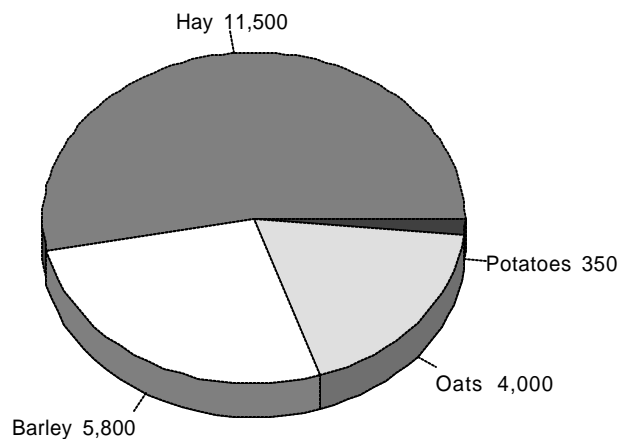
An expansive future may lie ahead for the Delta area. A gold mine and the new test missile site are the conduits for change. Construction crews, defense-related workers and uniformed personnel will revive the military post. If all goes well, a new gold mine within commuting distance of Delta Junction will further stimulate the local economy. Families may accompany uniformed and base support personnel. Miners with families may take up residence in the area as well. The influx of immigrants should continue. The area will gain jobs, and doors of opportunity will open for current and new residents.

Value of Production Tanana Valley 10



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

How Tanana Valley Farmers Planted their main acreage in 2001 11



Source: USDA, Alaska Agricultural Statistics Service